

ROCKY FLATS PLANT
EMD OPERATING
PROCEDURES MANUAL

Manual No.: 5-21000-OPS-GT
Procedure No.: Table of Contents, Rev 9
Page: 1 of 3
Effective Date: 12/03/91
Organization: Environmental Management

THIS IS ONE VOLUME OF A SIX VOLUME SET WHICH INCLUDES:
CONTROLLED DOCUMENT
EG&G — ROCKY FLATS PLANT
ENVIRONMENTAL MANAGEMENT
VOLUME I: FIELD OPERATIONS (FO)
VOLUME II: GROUNDWATER (GW)
VOLUME III: GEOTECHNICAL (GT)
VOLUME IV: SURFACE WATER (SW)
VOLUME V: ECOLOGY (EE)
VOLUME VI: AIR (AP)
This is a RED stamp

TABLE OF CONTENTS
FOR VOLUME III: GEOTECHNICAL

<u>New Proc. No.</u>	<u>Old Proc. No.</u>	<u>Title</u>	<u>Rev. No.</u>	<u>Effective Date</u>
GT.01	3.1	Logging Alluvial and Bedrock Material	1	8/30/91
DCN 91.01		Recording lithologic descriptions and securing core boxes	1	11/15/91
DCN 91.02		Clarification of log approval for multi-use wells	1	12/03/91
GT.02	3.2	Drilling and Sampling Using Hollow Stem Auger Techniques	1	8/30/91
DCN 91.01		Unconsolidated core samples need not be peeled before sampling	1	10/29/91
DCN 91.02		Correction of well location for low Alluvial thickness	1	11/6/91
DCN 91.03		Ten foot long core barrels	1	11/15/91
GT.03	3.3	Isolating Bedrock From the Alluvium with Grouted Surface Casing	1	8/30/91
DCN 91.01		Change in criteria for cement grouting	1	10/02/91
DCN 91.02		Grout procedure clarification	1	10/28/91

ADMIN RECORD

REVIEWED FOR CLASSIFICATION/UCM
By F. J. Curran U-200
Date 1-6-92
A-SW-001102

**ROCKY FLATS PLANT
EMD OPERATING
PROCEDURES MANUAL**

Manual No.: 5-21000-OPS-GT
Procedure No.: Table of Contents, Rev 9
Page: 2 of 3
Effective Date: 12/03/91
Organization: Environmental Management

<u>New Proc. No.</u>	<u>Old Proc. No.</u>	<u>Title</u>	<u>Rev. No.</u>	<u>Effective Date</u>
GT.04	3.4	Rotary Drilling and Rock Coring	1	8/30/91
DCN 91.01		Core barrel decontamination	1	10/22/91
DCN 91.02		Clarification of measuring tape decontamination requirements	1	10/29/91
DCN 91.03		Clarification of the use of super gel-x	1	12/03/91
GT.05	3.5	Plugging and Abandonment of Boreholes	1	8/30/91
DCN 91.01		Surface casing classification	1	10/22/91
GT.06	3.6	Monitoring Wells and Piezometer Installation	1	8/30/91
DCN 91.01		Industry Standard is 1 foot into Bedrock	1	10/15/91
DCN 91.02		For the Sitewide Program, Claystone Smearing does not seem to be a problem	1	10/15/91
DCN 91.03		Superseded by DCN 91.06	1	11/08/91
DCN 91.04		Low Alluvial thickness wells	1	11/06/91
DCN 91.05		Superseded by DCN 91.08	1	11/06/91
DCN 91.06		Change in filter pack guidance	1	11/08/91
DCN 91.07		Decontamination for site-wide geological characterization	1	11/15/91
DCN 91.08		Figure replacement (GT.6-1)	1	11/15/91
DCN 91.09		Sampling with center bit drilling	1	12/03/91
GT.07	3.7	Logging and Sampling of Test Pits and Trenches	1	8/30/91

**ROCKY FLATS PLANT
EMD OPERATING
PROCEDURES MANUAL**

Manual No.: 5-21000-OPS-GT
Procedure No.: Table of Contents, Rev 9
Page: 3 of 3
Effective Date: 12/03/91
Organization: Environmental Management

<u>New Proc. No.</u>	<u>Old Proc. No.</u>	<u>Title</u>	<u>Rev. No.</u>	<u>Effective Date</u>
GT.08	3.8	Surface Soil Sampling	1	8/30/91
DCN 91.01		Clarification supplementation of GT.08 - Surface Soil Sampling	1	11/26/91
GT.09	3.9	Soil Gas Sampling and Field Analysis	1	8/30/91
GT.10	3.10	Borehole Clearing	1	8/30/91
GT.11	3.11	Plugging and Abandonment of Wells	1	8/30/91
GT.15	3.15	Geophysical Borehole Logging	1	8/30/91
DCN 91.01		No Hole will be left Unlogged at the end of the day	1	10/15/91
GT.17	3.17	Land Surveying	1	8/30/91
GT.18	3.18	Surface Geophysical Surveys	1	8/30/91
GT.19	3.19	Field Gas Chromatographs	1	8/30/91
GT.20	3.20	Procedures for Soil Interstitial Water Sampling and Sampler Installation	1	8/30/91

ENVIRONMENTAL MANAGEMENT DOCUMENT CHANGE NOTICE (DCN)

Procedure Number 5-21000-OPS-GT.4, Rev. 1

Page 1 of 1

Title Rotary Drilling and RFP	This is a CONTROLLED DOCUMENT	Date 10-25-91	DCN Number 5-21000-OPS-GT.04 91.03
Expires <u>3-2-92</u>		EC&C -- Procedure Revision Required <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
ENVIRONMENTAL MANAGEMENT DEPARTMENT			
Scope Limitation <u>Sitewide Geologic</u>			
This is a RED Stamp			

Item Number	Page	Step or Paragraph	Changes (Use DCN CONTINUATION SHEET for Additional Space)
1	7 of 10	5.3.1.1 paragraph 1	Add after the first sentence: "When caving becomes a problem during drilling with water, Super Gel-X (powdered bentonite) may be added to the RFP potable water to slightly increase the density of the drilling fluid." <i>Ensure this is noted on the applicable log and/or form.</i> 12/3/91

Justification (Reason for Change -- Provide Numbers To Reference Corresponding Items Above)

Slightly increasing the weight of the drilling fluid is often sufficient to save the borehole by slowing down or stopping caving. If the weight cannot be increased, often the borehole is lost.

Concurrence	Organization	Req	Date	Concurrence	Organization	Req	Date
<i>[Signature]</i>	QAPM	X	12/3/91	<i>[Signature]</i>	User	X	11/25/91
<i>[Signature]</i>	EDM	X	12/2/91				

Approval of Responsible Manager <i>[Signature]</i>	Date 11/27/91	Is Posting Req'd? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If Yes, By What Date?	Date Posted
---	------------------	--	-----------------------	-------------